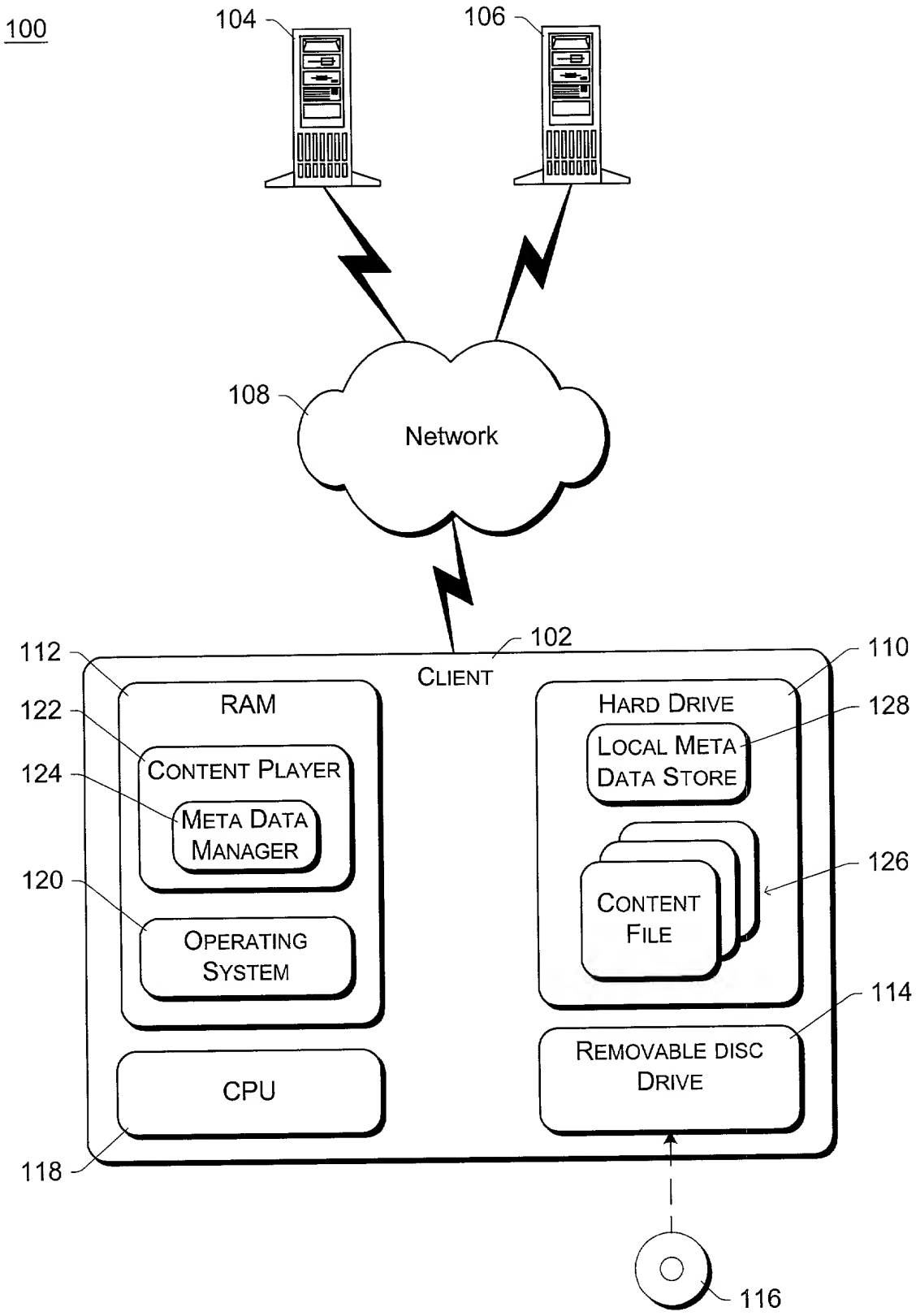
100
104
106
108
Network
102
CLIENT
112
RAM
122
CONTENT PLAYER
124
META DATA MANAGER
120
OPERATING SYSTEM
CPU
118
110
HARD DRIVE
128
LOCAL META DATA STORE
126
CONTENT FILE
114
REMOVABLE DISC DRIVE
116

Fig. 1

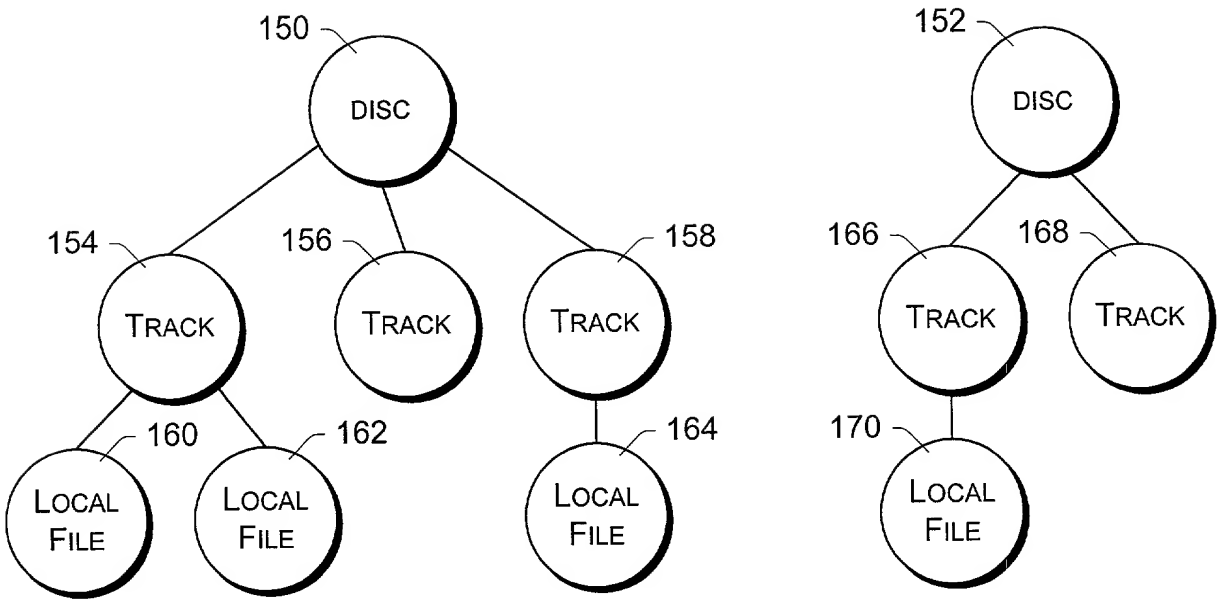

Fig. 2

Doc ID: US 2005/0086195 A1

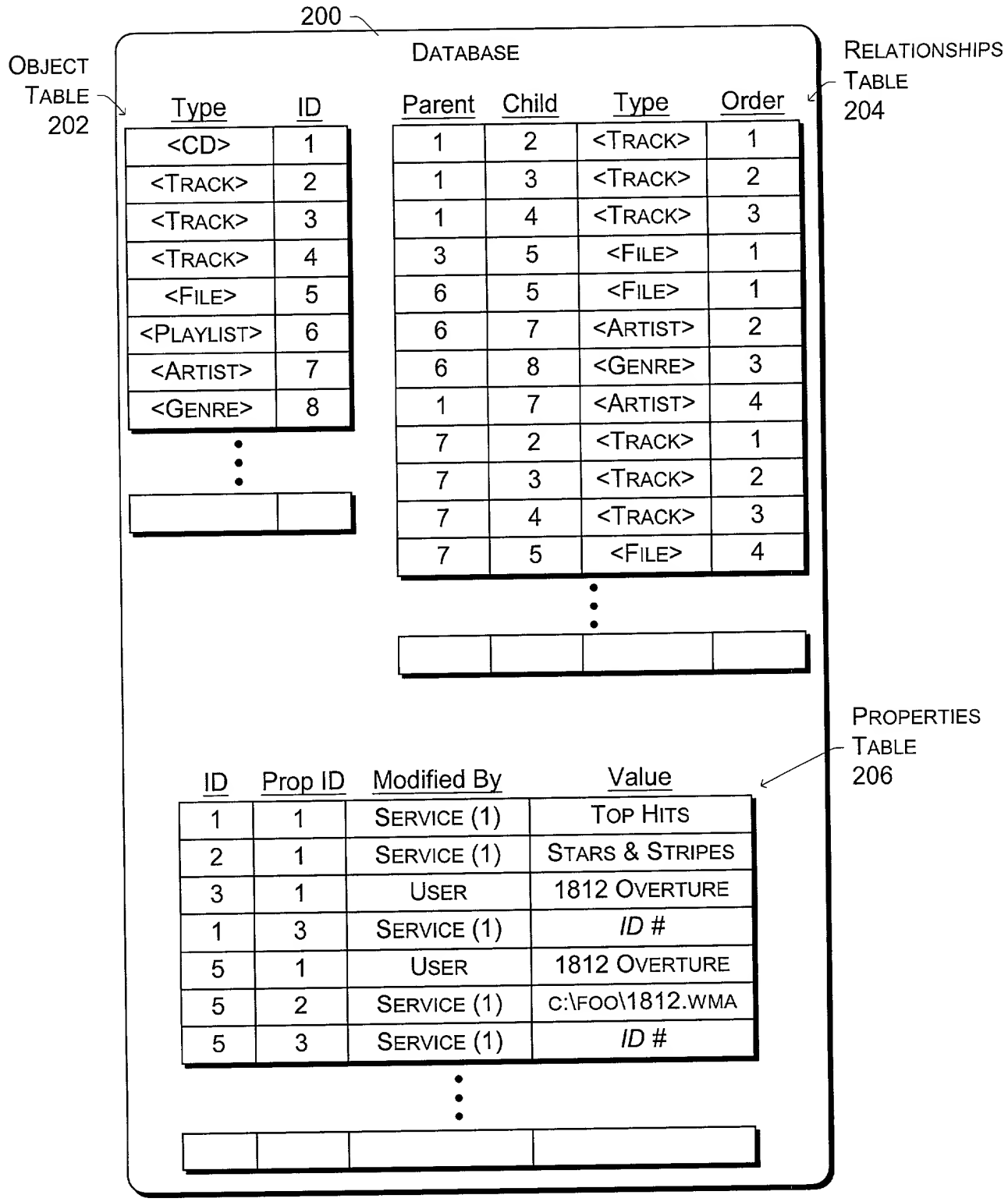
200
DATABASE
OBJECT TABLE 202
RELATIONSHIPS TABLE 204
PROPERTIES TABLE 206
Type
ID
<CD> 1
<TRACK> 2
<TRACK> 3
<TRACK> 4
<FILE> 5
<PLAYLIST> 6
<ARTIST> 7
<GENRE> 8
Parent
Child
Type
Order
1 2 <TRACK> 1
1 3 <TRACK> 2
1 4 <TRACK> 3
3 5 <FILE> 1
6 5 <FILE> 1
6 7 <ARTIST> 2
6 8 <GENRE> 3
1 7 <ARTIST> 4
7 2 <TRACK> 1
7 3 <TRACK> 2
7 4 <TRACK> 3
7 5 <FILE> 4
ID
Prop ID
Modified By
Value
1 1 SERVICE (1) TOP HITS
2 1 SERVICE (1) STARS & STRIPES
3 1 USER 1812 OVERTURE
1 3 SERVICE (1) ID #
5 1 USER 1812 OVERTURE
5 2 SERVICE (1) C:\FOO\1812.WMA
5 3 SERVICE (1) ID #

Fig. 3

220

```
<?xml version="1.0" encoding="UTF-8" ?>
- <OMI xmlns:sql="urn:schemas-microsoft-com:xml-sql">
    <name>Billboard Top Hits: 1983</name>
    <author>Various Artists</author>
    <releasedate>1992</releasedate>
    <genre>ROCK</genre>
    <style>Pop/Rock</style>
    <rating>8</rating>
    <copyright />
    <label>Rhino</label>
    <parent>AMG</parent>
  + <track>
  - <track>
      <name>Africa</name>
      <author>Toto</author>
    </track>
  - <track>
      <name>Stray Cat Strut</name>
      <author>Stray Cats</author>
    </track>
              .
              .
              .
</OMI>
```

Fig. 4

Express Mail Label No. EV339908545US

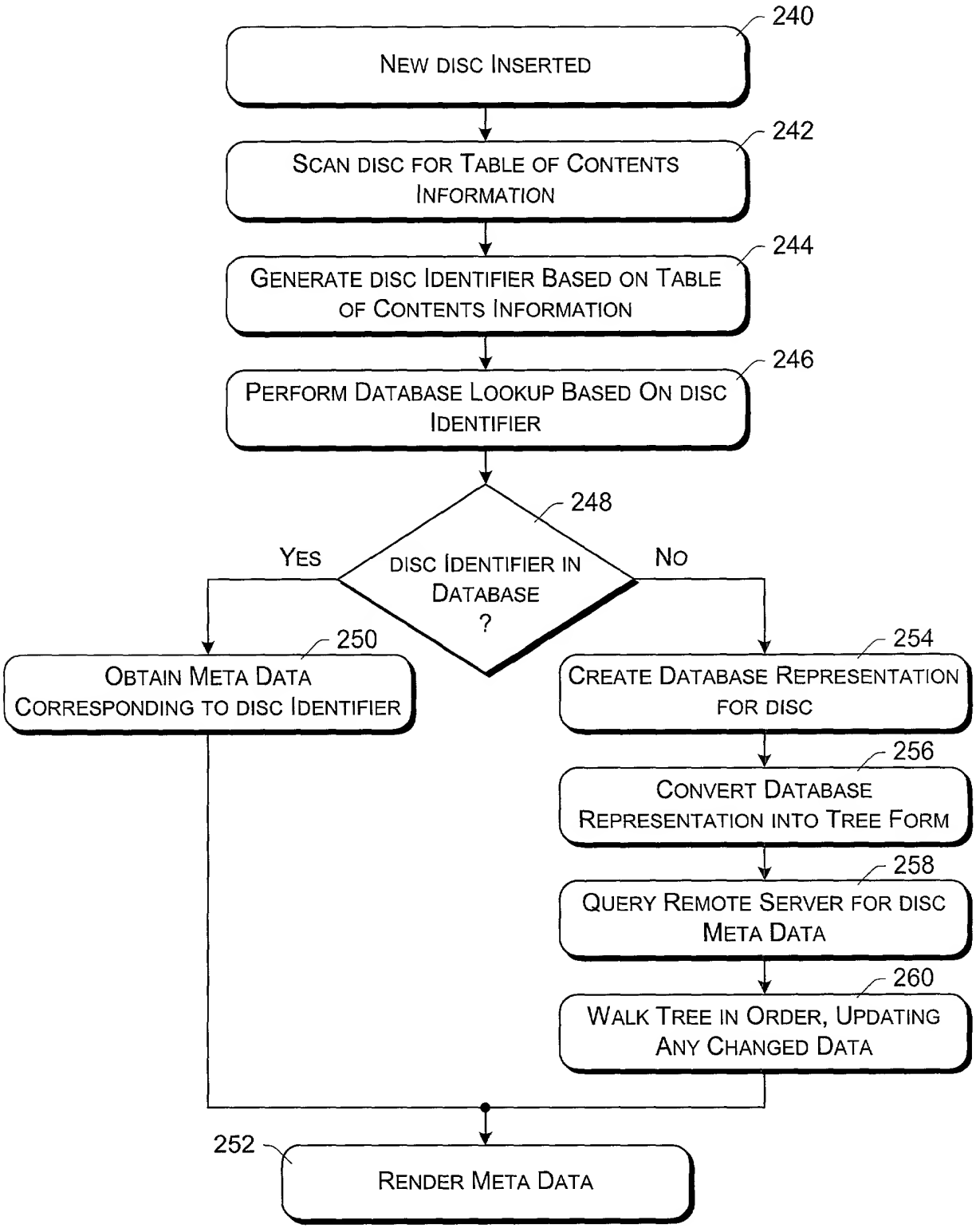
240
NEW DISC INSERTED
242
SCAN DISC FOR TABLE OF CONTENTS INFORMATION
244
GENERATE DISC IDENTIFIER BASED ON TABLE OF CONTENTS INFORMATION
246
PERFORM DATABASE LOOKUP BASED ON DISC IDENTIFIER
248
DISC IDENTIFIER IN DATABASE ?
YES
NO
250
OBTAIN META DATA CORRESPONDING TO DISC IDENTIFIER
254
CREATE DATABASE REPRESENTATION FOR DISC
256
CONVERT DATABASE REPRESENTATION INTO TREE FORM
258
QUERY REMOTE SERVER FOR DISC META DATA
260
WALK TREE IN ORDER, UPDATING ANY CHANGED DATA
252
RENDER META DATA

Fig. 5

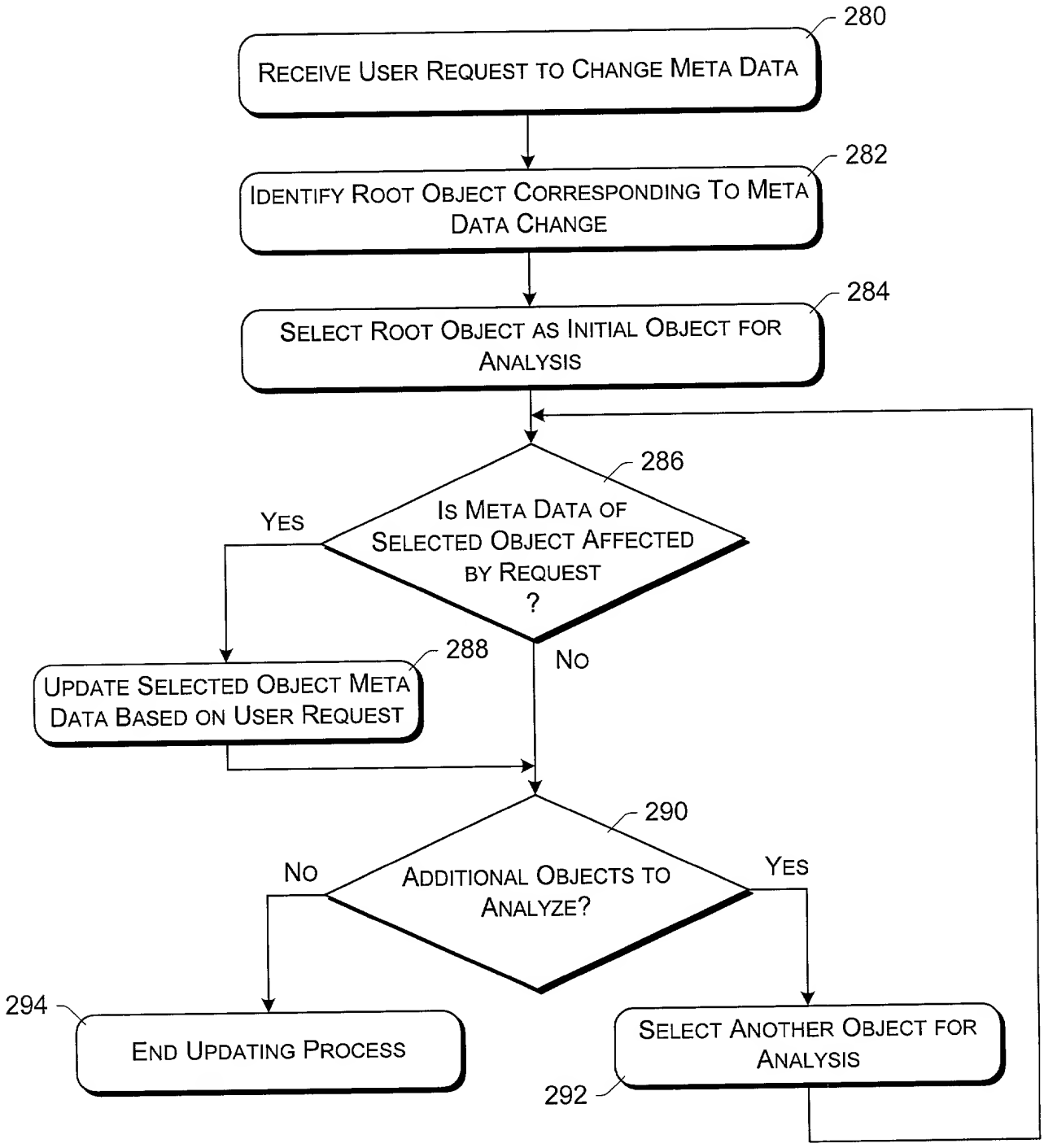
280
RECEIVE USER REQUEST TO CHANGE META DATA
282
IDENTIFY ROOT OBJECT CORRESPONDING TO META DATA CHANGE
284
SELECT ROOT OBJECT AS INITIAL OBJECT FOR ANALYSIS
286
IS META DATA OF SELECTED OBJECT AFFECTED BY REQUEST ?
YES
NO
288
UPDATE SELECTED OBJECT META DATA BASED ON USER REQUEST
290
ADDITIONAL OBJECTS TO ANALYZE?
NO
YES
294
END UPDATING PROCESS
SELECT ANOTHER OBJECT FOR ANALYSIS
292

Fig. 6

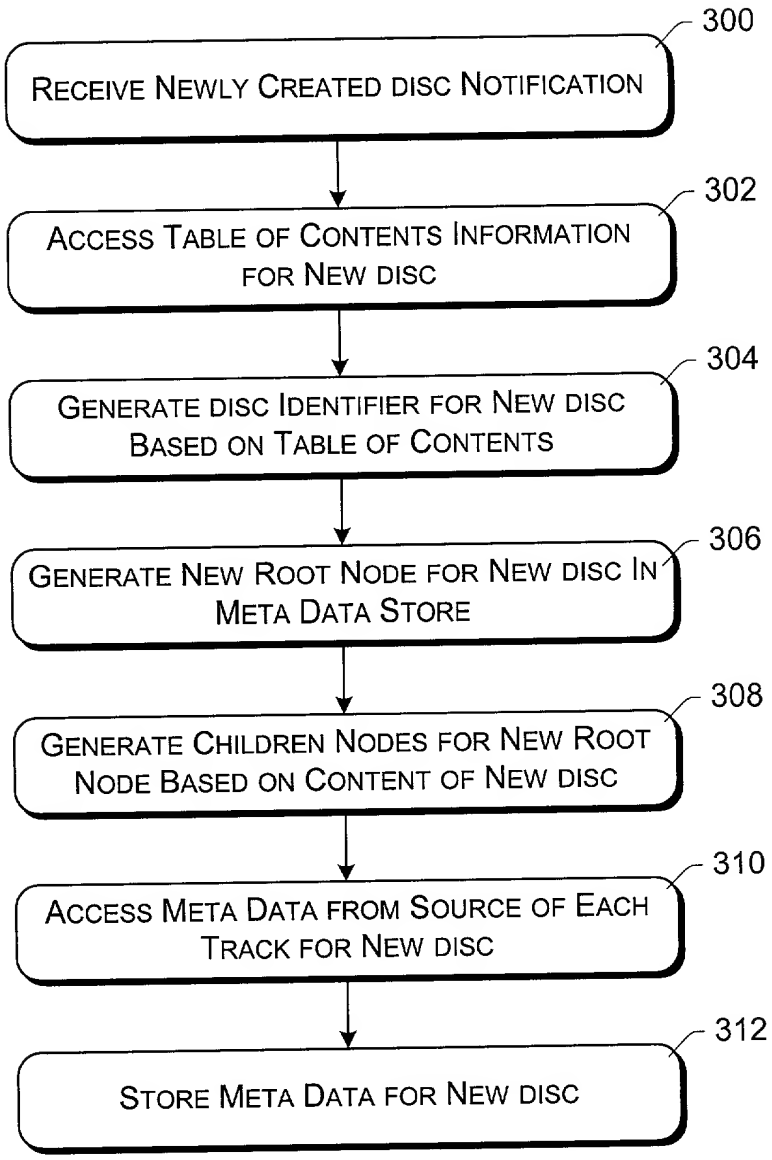

Fig. 7

Doc ID: US 20060265368 A1

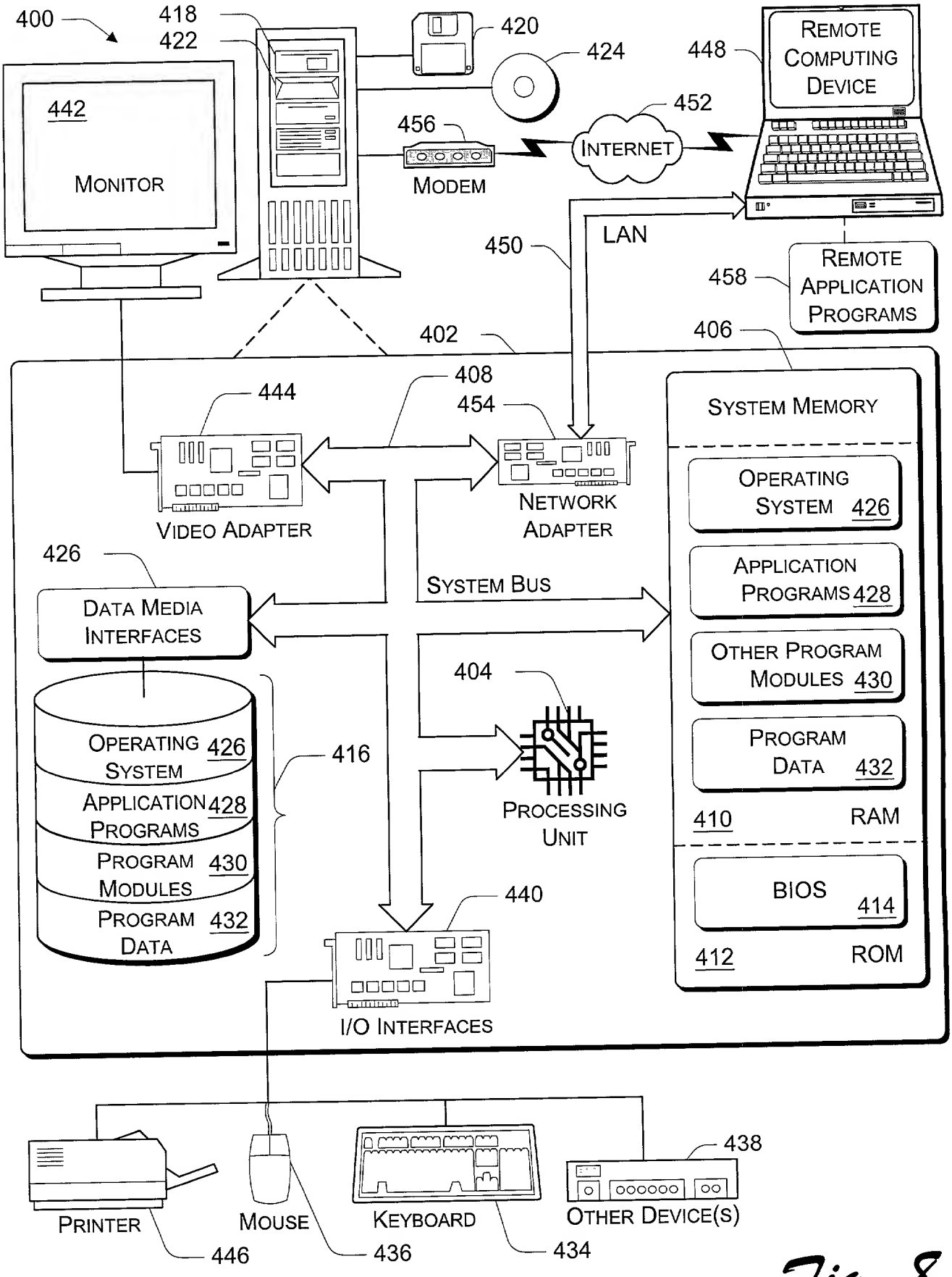
400
418
422
420
424
448
REMOTE COMPUTING DEVICE
442
MONITOR
456
MODEM
452
INTERNET
LAN
450
458
REMOTE APPLICATION PROGRAMS
402
406
444
408
454
SYSTEM MEMORY
VIDEO ADAPTER
NETWORK ADAPTER
OPERATING SYSTEM 426
APPLICATION PROGRAMS 428
OTHER PROGRAM MODULES 430
PROGRAM DATA 432
426
DATA MEDIA INTERFACES
SYSTEM BUS
404
PROCESSING UNIT
410
RAM
BIOS 414
412
ROM
OPERATING SYSTEM 426
APPLICATION PROGRAMS 428
PROGRAM MODULES 430
PROGRAM DATA 432
416
440
I/O INTERFACES
438
PRINTER
MOUSE
KEYBOARD
OTHER DEVICE(S)
446
436
434

Fig. 8